

Gulf of the Farallones National Marine Sanctuary

Commercial Fisheries- Executive Summary



Jan Roletto
Photo: Jan Roletto

An aerial perspective shows the South Farallon Islands, surrounded by the GFNMS.



Photo: GFNMS

A vessel fishing in the sanctuary.

Economic Impact of the Commercial Fisheries on Local County Economies from Catch in the Gulf of the Farallones National Marine Sanctuary, 2010, 2011 and 2012

Introduction

This fact sheet summarizes a Conservation Series report on the economic impacts of commercial fishing in the Gulf of the Farallones National Marine Sanctuary (GFNMS). The California Ocean Fish Harvester Economic Model (COFHE) provides county multipliers to determine direct and indirect impacts on local county economies.

Economic Impacts

According to the three-year average, the commercial fishing industry in the GFNMS generated over \$15 million in harvest revenues annually. These revenues yielded just under \$25 million in total output, over \$16 million in value added, \$15 million in total income and 291 full-and part-time jobs. In total, this accounted for about 0.01% of income by place of residence, income by place of work and total employment in the 10-county study area in 2011.

Overall economic trends showed fluctuation within the three-year study period for harvest revenue, output, value added and total income. These indicators increased from 2010 to 2011 and then decreased slightly from 2011 to 2012. However, employment steadily increased from 2010 to 2012.

Consistently, the economic impacts of commercial fishing in the GFNMS were concentrated in San Francisco and Sonoma counties. For the three-year average, the two counties accounted for 84% of harvest revenue and value added, 78% of output, 81% of income and 79% of employment.

Profiles of the Fisheries

Twenty-one different species/species groups were evaluated in the analysis. *Dungeness crab* was the dominant species caught in the GFNMS. In 2012, *Dungeness crab* landings generated over \$13 million in value and over 83% of total value landed from the GFNMS. The secondary species was *Salmon* with almost \$2.1 million in value, accounting for almost 13% of total value landed from the GFNMS in 2012.

Economic Impacts (3-year average)

- \$15,019,461 in harvest revenues
- \$24,878,544 in total output
- \$16,287,514 in value added
- \$15,110,782 in total income
- 291 full- and part-time jobs
- Concentrated in San Francisco & Sonoma counties

Species & Gears (2012)

- *Dungeness crab* (83% of total value)
- *Salmon* (13% of total value)
- "Pots & Traps" (84% of total value)
- "Troll" (13% of total value)
- Increase in *Dungeness crab*, 2011
- "Pots & Traps" declined from 97% in 2010

Ports & Vessels (2012)

- \$2,460,331 landed at San Francisco
- San Francisco 56% dependent
- \$1,565,515 landed at Bodega Bay
- Bodega Bay 45% dependent
- 214 vessels in 2012
- 1,300% increase in "Troll" vessels, 2010 to 2012

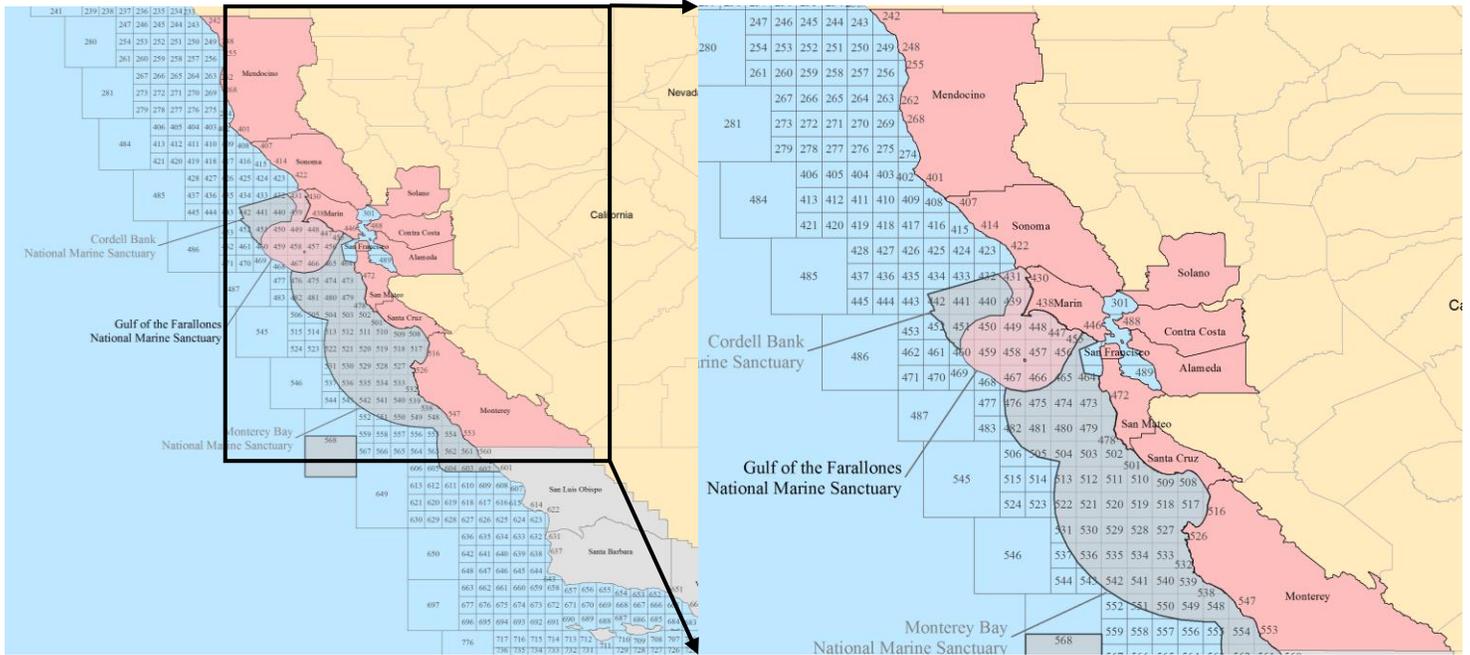


Photo: Tony Reyer

Overlay of the Gulf of the Farallones National Marine Sanctuary and California Department of Fish and Game blocks with three-digit code (light blue). Counties included in economic analysis (rose).

Detailed trends of the top five species/species groups demonstrated strong variability over the study period. Establishing causal relationships was difficult because of multiple dynamics present. For example, the *Dungeness crab* fishery showed cyclical trends according to ocean conditions. In addition, ocean conditions impacted the *Salmon* fishery. However, regulations such as the *Salmon* closure from 2008 to 2009 also helped to describe trends in the fishery.

Study Area

The study area included the 10 counties

highlighted in rose in the figure above. Catch was landed at 51 ports across these counties. The top two ports in 2012 were San Francisco and Bodega Bay. Almost \$2.5 million was landed from GNFMS at San Francisco in 2012, which represented almost 56% of the total value landed at the port. Almost \$1.6 million was landed at Bodega Bay from GNFMS, which represented almost 45% of total value landed at the port. In general, the top four ports varied in dependence on catch from the GNFMS, ranging from a high of 97% at Vallejo to a low of 3% at Princeton-Half Moon.

Catch from the GNFMS was defined spatially with California Department of Fish and Wildlife blocks. The overlay in the figure above shows the best approximation of blocks representing the GNFMS.

More information

The full report can be accessed online at:

http://sanctuaries.noaa.gov/science/conservation/pdfs/gfnms_fishing_report.pdf

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A Salmon fishing boat "BOUNTY" that fishes in GNFMS.



Photo: GNFMS

A *Dungeness crab*, the top species harvested in the GNFMS in 2012.